Palmetto State Clean Fuels Coalition
-We're On The Road To Cleaner Air-

Palmetto State Clean Fuels Coalition Newsletter
December 2004

Stakeholder Spotlight

University of South Carolina Opens "Green Dorm"
University of South Carolina officials and students gathered November 5 to celebrate the official opening of Carolina's "green dorm," the largest residence-hall complex of its kind in the world.

Located at the corner of Sumter and Wheat streets, the 172,000-square-foot complex includes three four-story buildings with the latest technology and environmental features for conserving water and energy and creating a healthier, greener environment for the 500 undergraduate students who call it home. It also boasts an outdoor amphitheater, a learning center that is powered partly by a hydrogen fuel cell, a turf roof and a café that sells healthy foods and environmentally sensitive products.

USC President Andrew Sorensen said the residence hall is another example of Carolina's success in integrating a first-class living and learning community for students. "With West Quad, we've again positioned the University of South Carolina as a leader for the state and region on an important issue -- sustainable development," Sorensen said. "Not only will West Quad broaden Carolina students' education as they live and learn lessons of environmental responsibility, but it also will be a site for faculty research on the environment and energy and serve as a catalyst for community and statewide environmental initiatives.

Officially called the West Quad, USC's "green dorm" is one of the first newly constructed green college residence halls in the United States. The facility was built with a significant amount of recycled materials, ranging from the cement blocks and copper roof to the interior carpet. West Quad includes a 9,000-square-foot living and learning center that includes meeting rooms and classrooms where students can take classes on sustainability, environmental groups can hold meetings, and faculty can host conferences. Biology students and faculty, along with residents, helped grow and plant drought-resistant, low-growing greenery as part of an extensive storm-water filtering and management system.

West Quad, which cost roughly $40 million, was built for about the same cost as a traditional residence hall, debunking the myth that building green costs more and setting the standard for other green college facilities scheduled to open throughout the United States in the next several years.

"USC has demonstrated with West Quad that designing smart, healthy buildings can be accomplished without added costs," said Housing Director Gene Luna. "Furthermore, we will be operating the complex with significantly reduced utility costs."
"Green" is a term that describes environmental practices and buildings that are more energy-efficient and have a minimal impact on the environment.

West Quad uses 45 percent less energy and 20 percent less water than similarly sized traditional residence halls. The heating, ventilation, cooling, refrigeration and fire suppression systems are free of ozone-depleting substances. Water is preheated by a solar collection system, the largest of its kind on the East Coast. Electricity and hot water for the learning center are generated partly by a five-kilowatt hydrogen fuel cell, which also will be used as a teaching tool by chemical-engineering faculty. The turf roof on the learning center not only cools the building by absorbing heat but reduces rainwater runoff, which improves storm water management.

Special light shelves in the windows ensure energy efficiency and comfort by deflecting natural light into the rooms and reflecting it off the ceiling to light the room and reduce the heat of direct sunlight. Interior lights include motion sensors that automatically turn lights on and off as people enter and exit a room. Other green features include low-flow plumbing, high-efficiency washers and dryers, a changing room for bicyclists who commute to campus and lots of outdoor green space for relaxation. "We designed this residential living and learning community so that students can live comfortably and, at the same time, have the experience of living in a way that is environmentally friendly," Luna said. "By doing so, we hope they will realize that comfort and 'green' are not mutually exclusive."

USC is forging ahead as an emerging leader in building green. The new Arnold School of Public Health, scheduled to open in 2005, also is being built to adhere to sustainable principles.

USC has registered West Quad with the U.S. Green Building Council (USGBC) and is awaiting the council's LEED (Leadership in Energy and Environmental Design) certification, which sets and measures international standards for green buildings. Only two universities have residence halls with LEED certification: Carnegie Mellon, which is 71,000 square feet, and Duke University, which was renovated to be made "green." Once certified, West Quad will be the third LEED building in South Carolina. Furman University's Hipp Hall academic building, and Cox and Dinkins, an engineering and surveying firm in Columbia, are LEED certified.

If you would like to tour USC's "green dorm", plan to attend the next Palmetto State Clean Fuels Coalition Stakeholders' meeting. USC and Sustainable Universities will host our January meeting scheduled for Thursday, January 20, 2005 from 2:00 pm-4:00 pm. MARK YOUR CALENDARS!

E85 Infrastructure Network Expanding in South Carolina

Gervais Street Exxon E85 Station Open for Business

An ***E85 for 85¢*** promotional event was held to officially kick off the opening of the Columbia area's first publicly accessible E85 station on October 6, 2004. The new E85 tank and dispenser is located at 1421 Gervais Street in Columbia and is open from 7 am until 10 pm Monday – Friday and from 8 am until 6 pm on Saturday. The E85 for 85¢ event was intended to put E85 in the spotlight and increase awareness of the availability and benefits of using E85.

Attendees at the event included: Interim Commissioner of Agriculture Hugh Weathers-who fueled his personal vehicle with E85; Columbia Mayor Bob Coble, Representative James Smith, Interim Director of State Fleet Management Jeff McCormack, State President of the SC Future Farmers of America Jaime Hughes, and SC Energy Office Director John Clark.

Love Chevrolet located at 1255 Knox Abbott Drive in Cayce worked with the Coalition to promote the E85 infrastructure by mailing postcards to individuals and fleets that purchased a Flexible Fuel Vehicle from their dealership over the past two years. The PSCFC hopes that other dealerships will follow Love Chevrolet's lead in undertaking efforts to make owners aware that their vehicle is an FFV and that they have a cleaner-burning fuel choice!

The Coalition also extends great thanks to the National Ethanol Vehicle Coalition (NEVC) for their assistance. The NEVC provided staff support and guidance as well as station promotional materials.

Brandi Petroleum and Pitt Stop Convenience Stores to Offer E85 in 2005

Construction on the Brandi Petroleum/Pitt Stop Convenience Stores E85 infrastructure project is underway! A new E85 tank and dispenser is currently being installed at Pitt Stop Convenience Store #28 located at 595 Spears Creek Church Road in Elgin, South Carolina. The Elgin location should be in operation early January and will be followed by the Pitt Stop Convenience Store #35 located at 2020 Bluff Road in Columbia, South Carolina. Brandi Petroleum will complete work on two additional sites Pitt Stop Convenience Store #13 located at 7409 Broad River Road in Irmo, South Carolina; and Pitt Stop Convenience Store #16 located at 5019 Augusta Road in Lexington, South Carolina early 2005.

Spinx First to Offer E85 in Upstate

The Palmetto State Clean Fuels Coalition is pleased to announce that E85 will be available at two Spinx stores in the upstate region of South Carolina in early 2005! The Catawba Regional Council of Governments recently completed contracts that will fund infrastructure projects along Interstate 85. The Spinx Company, headquartered in Greenville, South Carolina, operates more than 78 convenience stores and supplies another 25 with gasoline in North and South Carolina. The E85 infrastructure will be located at Spinx Store # 121 located at 2497 S. Highway 14, Greer, South Carolina, 29651 and at Spinx Store # 138 located at 1519 White Horse Road, Greenville, South Carolina, 29605.

Funding for the Gervais Street Exxon, Pitt Stop/Brandi Petroleum and Spinx ethanol infrastructure was provided through a Supplemental Environmental Project (SEP) for Community Improvement structured from an $11.2 million fine levied against Willamette Industries by the Environmental Protection Agency. The SEP is designed to help clean-up the air in the State of South Carolina by funding the installation of publicly accessible ethanol refueling infrastructure. The E85 infrastructure project is coordinated by the Catawba Regional Council of Governments in cooperation with the SCDHEC-Bureau of Air Quality. For more information, contact Wendy Bell at (803) 327-9041 or wbell@catawbacog.org.

Funding

Special Projects

Special Projects Funding announcements will be made soon. As discussed at our last stakeholders' meeting, we want to begin development of applications to ensure that South Carolina has the best applications possible. The Coalition was fortunate to receive more than $230,000 in Clean Cities Special Projects funding in the last grant cycle, and we want to make certain that we develop applications for the upcoming grant cycle that are competitive nationwide. We anticipate that the funding categories will be similar to the last solicitation and include: Niche Market AFV deployment, Refueling Infrastructure, AFV School Buses and supporting infrastructure, Idle Reduction Technologies, and Coalition Support. For more information contact Wendy Bell at (803) 327-9041 or wbel@catawbacog.org or Chantal Fryer at (803) 737-8030 or CFryer@gs.sc.gov

Ethanol Infrastructure

The National Ethanol Vehicle Coalition (NEVC) has funding available for E85 infrastructure. Funding may be used for installation of new tanks and fueling infrastructure or the retrofit of existing tanks and dispensers. This funding is available to local governments as well as to publicly accessible fueling stations. Stakeholders are encouraged to develop proposals to submit to the NEVC as soon as possible. For more information contact Wendy Bell at (803) 327-9041 or via email at wbell@catawbacog.org.

Industry News

Nissan Titan Flexible Fuel Vehicle Now Available

Nissan North America announced that the 2005 Nissan Titan will be available as a Flexible Fuel Vehicle (FFV). The 2005 Titan FFV will be available in all existing MY05 Titan configurations. Pricing for the Titan FFV remains the same as for the "standard" Titan. The Titan FFV was wholesale released on Monday, December 20th, and will be distributed exclusively in the South East, South Central, North Central and Mid-Atlantic Nissan Regions. 100% of Titans delivered to these regions for the remainder of the 2005 model year will be FFV. For a complete list of FFVs go to www.E85fuel.com.

New Hybrid Vehicles Increase Gas-saving Options for Consumers

The number of hybrid vehicles available to consumers continues to grow. For model year 2005, Ford Motor Company began offering the first commercially available hybrid SUV, the Escape Hybrid, and Honda added the Accord Hybrid to its lineup in December. Toyota Motor Corporation will offer hybrid versions of the Toyota Highlander and Lexus RX400 SUVs in early 2005. Introduction of these new models further increases consumer choices for hybrid vehicles.

In addition to these new hybrids, the Honda Insight and Civic Hybrid and the Toyota Prius are still available to consumers and offer exceptional gas mileage, the best in their respective classes. These vehicles are

also environmentally friendly, emitting less global warming and smog-forming emissions than most conventional vehicles. Hybrid pickup trucks are also available as General Motors Corporation continues to offer the Chevy Silverado and GMC Sierra hybrid pickup trucks to a limited number of fleet and commercial operators in selected areas.

Even more hybrid choices coming soon. According to automakers, consumers who care about fuel economy will have a dozen hybrid cars and trucks to choose from within the next few years. Below is a list of hybrids and their announced introduction dates.

Manufacturer	Model	Type	Estimated Date Available
Model Year 2005			
Dodge	Ram Contractor Special	Fullsize Pickup	Fall 2004
Honda	Accord Hybrid	Midsize Car	Fall 2004
Lexus	RX 400h	Midsize SUV	Spring 2005
Toyota	Highlander	Midsize SUV	Spring 2005
Model Year 2006-2008			
Saturn	VUE	SUV	2006
Mercury	Mariner Hybrid	Midsize SUV	2006
Nissan	Altima Hybrid	Midsize Car	2006
Chevrolet	Malibu/Equinox	Midsize Car/ SUV	2007
Chevrolet	Tahoe (AHS II)	SUV	2007
GMC	Yukon Hybrid (AHS II)	SUV	2007
Ford	Futura	Midsize Car	2007
GMC	Sierra Hybrid (AHS II)	Fullsize Pickup	2008
Chevrolet	Silverado Hybrid (AHS II)	Fullsize Pickup	2008

Sources: J.D. Power-LMC; Energy & Environmental Analysis (EEA), Inc.

How do hybrids get such great gas mileage?
It is no accident that the most fuel efficient vehicles in some classes for the 2005 model year are hybrid-electric vehicles (HEVs). Hybrids can be configured in many different ways to achieve a variety of different objectives. They combine the best features of the internal combustion engine with an electric motor and can significantly improve fuel economy without sacrificing performance or driving range. HEVs may also be configured to provide electrical power to auxiliary loads such as power tools.

HEVs are primarily propelled by an internal combustion engine, just like conventional vehicles. However, they also convert energy normally wasted during coasting and braking into electricity, which is stored in a battery until needed by the electric motor. The electric motor is used to assist the engine when accelerating or hill climbing and in low-speed driving conditions where internal combustion engines are least efficient. Some HEVs also automatically shut off the engine when the vehicle comes to a stop and restart it when the accelerator is pressed. This prevents wasted energy from idling. Unlike all-electric vehicles, HEVs now being offered do not need to be plugged into an external source of electricity to be recharged; conventional gasoline and regenerative braking provide all the energy the vehicle needs.

Potential buyers should also be aware that the federal government is currently offering tax incentives for HEVs and other alternative fuel vehicles. Some states also offer incentives.

PSCFC Meeting Schedule

January 11 **Working Group 1: Fleets, Infrastructure and Funding**
Tuesday, January 11, 2005
9:00 am-10:30 am
SCDHEC Board Room
Third Floor, Commissioner's Office
2600 Bull Street

Columbia, South Carolina

January 11 **Working Group 2: Legislation, Outreach and Education**
Tuesday, January 11, 2005
11:00 am-12:30 pm
SCDHEC Board Room
Third Floor, Commissioner's Office
2600 Bull Street
Columbia, South Carolina

January 20 **Full Stakeholder Group**
Thursday, January 20, 2005
2:00-4:00 pm
USC-West Quad
Corner of Sumter and Wheat Streets
Columbia, South Carolina

This newsletter is funded by the South Carolina Energy Office (SCEO) and is also available on the Palmetto State Clean Fuels Coalition Webpage at www.palmettocleanfuels.org. If you have questions or comments about this newsletter, please contact Wendy Bell at wbell@catawbacog.org or at (803) 327-9041.